

ABSTRACT

In a signal processing device which performs data compression, a thinning circuit 1 generates thinned data by thinning input PCM data. For example, when a sampling rate 5 f_s of the PCM data (original data) is $f_s = 10$ Hz, thinned data of $f_s = 1$ Hz is generated. The determination circuit 2 controls the selection circuit 4 so that, based on the following expression:

$$\text{TOTAL1} = |X(n) - X(n-1)| + |X(n-1) - X(n-2)| + \dots + |X(n-8) - X(n-9)|$$

if $\text{TOTAL1} > C1$, the input PCM data is selected, and if otherwise the thinned data is 10 selected. The selected data and the determination result information of the determination circuit 2 are written into a memory 3. Therefore, data compression is performed with respect to original data with a simple circuit configuration and without losing required information of the original data.